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PTO/SB/50 (02-01)

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REISSUE PATENT APPLICATION TRANSMITTAL

| Address to: Attorney Docket | No. 740107-139 | | | | | | |
|--|---|--|--|--|--|--|--|
| Commissioner for Patents First Named Inv. | entor M Azuma | | | | | | |
| Box Reissue Original Patent ? | Number 6,142,138 | | | | | | |
| Washington, DC 20231 Original Patent I (Month/Day | ssue Date //Year) November 7, 2000 | | | | | | |
| Express Mail Lai | bel No. | | | | | | |
| | n Patent Plant Patent | | | | | | |
| APPLICATION ELEMENTS (37 CFR 1.173) ACCOMPA | NYING APPLICATION PARTS | | | | | | |
| 2. Applicant claims small entity status. See 37 CFR 1.27. | 10. Statement of status and support for all changes to the claims. See 37 CFR 1.173(c). | | | | | | |
| 3. Specification and Claims in double column copy of patent format (amended, if appropriate) 11. □ Original Claims in double column copy of patent format (amended, if appropriate) | inal U.S. Patent for surrender | | | | | | |
| | boned Original Patent Grant | | | | | | |
| 5. Reissue Oath/Declaration (original or copy) | ement of Loss (PTO/SB/55) | | | | | | |
| (37 C.F.R. § 1.175) (PTO/SB/51 or 52) 12. Forei | gn Priority Claim (35 U.S.C. 119) | | | | | | |
| 7. Original U.S. Patent currently assigned? \(\overline{\text{Yes}}\) No \(\overline{\text{I3}}\) \(\overline{\text{Infor.}}\) | mation Disclosure | | | | | | |
| Written Consent of all Assignees (PTO/SR/53) | ment (IDS)/PTO-1449 Citations | | | | | | |
| ■ 37 C.F.R. 8 3 73(b) Statement 14. ☐ Engli | sh Translation of Reissue Declaration (If applicable) | | | | | | |
| | 15. Preliminary Amendment | | | | | | |
| (Appendix) or large table | n Receipt Postcard (MPEP 503) | | | | | | |
| | ald be specifically itemized) | | | | | | |
| 2 Computer Produkto Francis (CER) 17. Other | STATEMENT OF MANI | | | | | | |
| b. Specification Sequence Listing on: | HER | | | | | | |
| i CD-ROM (2 copies) or CD-R (2 copies): or | | | | | | | |
| ii □ paper | | | | | | | |
| c. Statements verifying identity of above copies | | | | | | | |
| 18. CORRESPONDENCE ADDRESS | | | | | | | |
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| City State Fa | x | | | | | | |
| Country Telephone | | | | | | | |
| NAME (Print/Type) David S. Safram Registration No. (Attorn | 21,557 | | | | | | |
| Signature | Date 1/23/02 | | | | | | |

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PTO/SB/56 (02-01)
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| (C) 2 | | ependent claims 7 CFR 1.19(i)) | (D) 4 | | * 2 | | X \$ | = | | | | X \$ 84.00= | \$168.00 |
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| ***** "Highest Number of Independent Claims Previously For" or Number of Independent Claims in Patent (C). Applicant claims small entity status. See 37 CFR 1.27. | | | | | | | | | | | | | |
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| Please charge Deposit Account No in the amount of A duplicate copy of this sheet is enclosed. | | | | | | | | | | | | | |
| The Commissioner is hereby authorized to charge any additional fees under 37 CFR 1.16 or 1.17 which may be required, or credit any overpayment to Deposit Account No A duplicate copy of this sheet is enclosed. | | | | | | | | | | | | | |
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| Date Signature of Applicant, Atyricey or Agent of Record | | | | | | | | | | | | | |
| David S. Safran, Reg. No. 27,997 Typed or printed name | | | | | | | | | | | | | |

| In re Patent of |) |
|--|---|
| Masayuki AZUMA et al. | : |
| Patent No.: 6,142,138 | : |
| Issued: November 7, 2000 | : |
| For: HIGH SPEED METHOD OF ALIGNING | : |
| CUTTING LINES OF A WORKPIECE USING PATTERNS | : |

STATEMENT OF MANI FISHER

Commissioner for Patents Washington, D.C. 20231

Sir:

I, Mani Fischer, of 7 Taberski Street, Haifa 34762, Israel declare that my name was omitted as an inventor of the above-captioned patent through error without any deceptive intention on my part.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Mani Fischer

M. Fierba

STATEMENT UNDER 37 CFR 3.73(b)

| | | 5 | | |
|----------|----------------------------------|---|--|--|
| | | Patent Owner: Masayuki AZUMA, Hirofumi SHIMODA, Mani FISCHER | | |
| Appl | icatio | on No./Patent No.: U.S. Patent 6,142,138 Filed/Issue Date: November 7, 2000 | | |
| Entit | | HIGH SPEED METHOD OF ALIGNING CUTTING LINES OF A WORKPIECE USING | | |
| | TER | | | |
| Toky | | (Name of Assignce) , a corporation (Type of Assignce, e.g., corporation, partnership, university, government agency, etc.) | | |
| states | that it | it is: | | |
| 1. | l the | e assignee of the entire right, title, and interest; or | | |
| 2. | | an assignee of less than the entire right, title and interest. The extent (by, percentage) of its ownership interest is 50 % | | |
| in the | paten | nt application/patent identified above by virtue of either: | | |
| А. 🗷 | rec | n assignment from the inventor(s) of the patent application/patent identified above. The assignment was corded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy ereof is attached. | | |
| OR | | | | |
| В. [|] A c | chain of title from the inventor(s), of the patent application/patent identified above, to the current signee as shown below: | | |
| | 1. | From: | | |
| | 2. | From: | | |
| | 3. [] | From: To: The document was recorded in the United States Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. | | |
| su re | opies IOTE bmitte cords | of assignments or other documents in the chain of title are attached. A separate copy (i.e., the original assignment document or true copy of the original document) must be det to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the of the USPTO. See MPEP 302.08] igned (whose title is supplied below) is authorized to act on behalf of the assignee. | | |
| | _ | Date David S. Safran, Reg No. 27,997 Date Signature Attacay Level Title | | |

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| In re Patent of |) |
|--|---|
| Masayuki AZUMA et al. | : |
| Patent No.: 6,142,138 | : |
| Issued: November 7, 2000 | : |
| For: HIGH SPEED METHOD OF ALIGNING | : |
| CUTTING LINES OF A WORKPIECE USING PATTERNS | : |

CONSENT OF ASSIGNEE

Commissioner for Patents Washington, D.C. 20231

Sir:

As owner of an undivided one-half interest in the above-captioned patent, Kulicke & Soffa Investments, Inc. hereby consents to the reissuance of said patent and to the addition of Mani Fischer, of 7 Taberski Street, Haifa 34762, Israel, as an inventor of said patent.

Kulicke & Soffa Investments, Inc.

Name: Jeffrey C. Moore

Title: Secretary

| In re REISSUE Patent Application of |) |
|-------------------------------------|---|
| Masayuki AZUMA et al. | : |
| Patent No. 6,142,138 | : |
| Issued: November 7, 2000 | : |
| For: ALIGNMENT METHOD AND APPARATUS | ; |
| |) |

REQUEST FOR RECORDATION OF ASSIGNMENTS

Box Assignments Commissioner for Patents Washington, D.C. 20231

Sir:

Please find attached two (2) requests for recordation of assignment. Please record first the assignment of U.S. Patent No. 6,142,138 from Tokyo Seimitsu Co., Ltd. to Masayuki AZUMA and Hirofumi SHIMODA executed August 17, 2001. Thereafter, please record the assignment of U.S. Patent No. 6,142,138 from Masayuki AZUMA, Hirofumi SHIMODA, and Mani FISCHER to Tokyo Seimitsu Co., Ltd. and Kulicke & Soffa Investments, Inc. executed August 20, 2001 and August 27, 2001.

Respectfully submitted,

David S. Safran Registration No. 27,997

NIXON PEABODY LLP 8180 Greensboro Drive, Suite 800 McLean, Virginia 22102 Telephone: (703) 790-9110

| In re REISSUE Patent Application of |) |
|-------------------------------------|------------------------|
| Masayuki AZUMA et al. |) Group Art Unit: 3723 |
| Patent No. 6,142,138 |) Examiner: T. Eley |
| Issued: November 7, 2000 |) |
| For: ALIGNMENT METHOD AND APPARATUS | ;) : |
| |) |

Statement Under 37 C.F.R. § 1.173(c)

Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with the provisions of 37 C.F.R. § 1.173(c), the following statement is provided as to the status of all patent claims and all added claims, and an explanation as to the support in the disclosure for the concurrently made changes to the claims.

All of the patent claims are maintained and new claims 5 & 6 have been added.

Support for new claim 5 can be found in the patent disclosure as follows. Claim 5 is directed to an alignment apparatus (1) for aligning cutting lines of a workpiece which has a workpiece mounting means (cutting table 12) has an X, Y driving mechanism (72) and a rotational driving mechanism (74). Two imaging means (18, 19) are provide at the cutting blade units (see Fig. 3) and produce images of patterns on the workpiece. A storage means is provided which stores reference patterns at low magnification (low magnification memory 82) and at high magnification (high magnification memory 84). Pattern matching is performed by a comparator (90) which compares current images of patterns (from frame memory 86) with the stored reference patterns of low and high magnification and outputs a pattern matching signal which is used by a control means (controller 92) for driving the workpiece mounting means (see Fig. 4 and the description thereof in column 4).

Support for new claim 6 can be found in the patent disclosure as follows. Claim 6 is directed to diving machine that has cutting units (14, 16) with a pair of cutting blades (68, 70) and motors (60, 62) for rotating the cutting blades and an alignment apparatus (1) for aligning

cutting lines of a workpiece. Furthermore, a workpiece mounting means (cutting table 12) has an X,Y driving mechanism (72) and a rotational driving mechanism (74). Two imaging means (18, 19) are provide at the cutting blade units (see Fig. 3) and produce images of patterns on the workpiece. A storage means is provided which stores reference patterns at low magnification (low magnification memory 82) and at high magnification (high magnification memory 84). Pattern matching is performed by a comparator (90) which compares current images of patterns (from frame memory 86) with the stored reference patterns of low and high magnification and outputs a pattern matching signal which is used by a control means (controller 92) for driving the workpiece mounting means (see Fig. 4 and the description thereof in column 4).

Respectfully submitted,

David S. Safran Registration No. 27,997

NIXON PEABODY LLP 8180 Greensboro Drive, Suite 800 McLean, Virginia 22102 Telephone: (703) 790-9110